

## Request for Conditional Closure

**Site:** The site is known as the Tract 50 Drum Platform Foundation Site and designated by NOAA as Site 58. This site is not listed under the Two Party Agreement (TPA; NOAA 1996). Herein, it is referred to as the “site.”

**Location:** St. Paul Island, Alaska is approximately 800 miles southwest of Anchorage in the Bering Sea (Figure 1). On the island, the Tract 50 Drum Platform Foundation Site is located just east of the Salt Lagoon Channel and north of the Tract 50 National Oceanic and Atmospheric Administration (NOAA) administrative structures (Figure 2).

**Legal Property Description:** The site is located in Township 35 South, Range 132 West, Section 25 of the Seward Meridian, Alaska, as shown on the plat of rectangular survey, officially filed April 18, 1997. The drum platform foundation was located primarily within NOAA-owned Tract 50, though approximately the northern most third was located outside of Tract 50 on Tanadgusix Corporation (TDX) property (Figure 2).

**Type of Release:** Diesel fuel spilled or leaked from drums or pipes during past operations at the site.

### **History and Background:**

The area of the site is currently undeveloped and contains no aboveground structures. The area is the former location of a seal carcass byproducts plant dating back to 1918. The byproducts plant ceased operation once government management of commercial fur sealing ended in the early 1980s. The plant was demolished in 1988.

The byproducts plant used diesel fuel as heating oil. The fuel was stored in 55-gallon steel drums and transferred through steel piping. The drum storage platform, constructed of an approximately 125 foot (ft) long by 56 ft wide by 4 ft tall concrete wall and filled with soil, was located adjacent to the now demolished plant.

The former drum platform foundation was within an area designated for construction of a temporary dewatering cell to be used during the 2004 Army Corps of Engineers harbor improvement effort. The Corps and its contractor encountered suspected petroleum-contaminated soil (PCS) before construction began, and ultimately the Corps did not construct a dewatering cell at this location.

### **Summary of Site Investigations:**

In April 2004, NOAA staff collected approximately 10 screening samples from the suspected PCS within the foundation walls for analysis with thin-layer chromatography (TLC). Analysis results indicated elevated levels of diesel-range organics (DRO), confirming the presence of PCS. NOAA also surveyed the PCS using its survey-grade global positioning system (GPS) and estimated the volume of PCS above the surrounding grade to be approximately 500 cubic yards (CY). Soil below the surrounding grade was not screened but was also suspected to be PCS.

Subsequent to the concrete and above grade PCS removal (see *Summary of Cleanup Actions*), NOAA staff and a third-party sampler from Tetra Tech collected soil samples from 16 Geoprobe Macrocore boring locations, from ground surface to a maximum depth of 8 ft below ground surface (bgs) (NOAA 2004a, NOAA 2004b). These samples were analyzed for DRO using TLC, with some of the samples sent to an off-island fixed laboratory for quantitative analysis for gasoline-range organics (GRO); DRO; residual-range organics (RRO); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and select polynuclear aromatic hydrocarbons (PAHs). Samples from 8 of the 16 locations were found to contain DRO above the Alaska Department of Environmental Conservation (ADEC) Method Two cleanup level of 250 milligrams per kilogram (mg/kg). No other contaminants were found above their ADEC Method Two cleanup levels (NOAA 2004c).

In June 2004, Kelly-Ryan Inc. (KRI), as part of the Corps of Engineers Phase II Harbor Improvements Project, collected a total of five near-surface soil samples within Tract 50 to represent site conditions prior to their use of Tract 50 for the Harbor Improvement Project staging and sediments dewatering (KRI 2004). One of KRI's soil samples, located within the footprint of the former drum platform foundation, contained DRO above its ADEC Method Two cleanup level.

Groundwater data for the adjacent Diesel Seep Site (Sites 34 and 35/TPA Sites 13a and 13b) indicates that groundwater flow is from the east to the west (CESI 2001). Groundwater throughout the Diesel Seep Site is found at approximately +3.0 feet mean lower low water (MLLW; NOAA 2004a). Groundwater sampling results for five monitoring wells located at the Diesel Seep Site indicated that DRO was detected above its ADEC Table C cleanup level in two wells during 2000-2001 and in one well during 2004 (CESI 2001, IT Alaska 2002, Tetra Tech 2005; Figure 3).

#### **Summary of Applied Cleanup Levels:**

Because groundwater near the site contains contamination, ADEC Method Two cleanup levels, discussed at 18 AAC 75.341(c) (ADEC 2003), for contaminants of concern, excepting benzene, were applied to the site's corrective action. For benzene, NOAA had the option under the TPA to cleanup to the less stringent State of Alaska cleanup level in effect in 1991 (ADEC 1991). Cleanup criteria were applied to the maximum extent practicable (18 AAC 75.325(f), 18 AAC 75.990).

#### **Summary of Cleanup Actions:**

NOAA and its contractors commenced corrective action activities at the site on June 21, 2004. By June 22, 2004, they had completed the removal of 575 CY of above grade PCS from the site and the demolition of the drum platform foundation (NOAA 2004b, NOAA 2005). NOAA and its contractor remobilized to the site to excavate below grade PCS on October 19, 2004 (NOAA 2004c, NOAA 2005). During excavation, groundwater was consistently encountered at approximately 3 to 4 ft bgs. Excavation stopped at the groundwater table. On October 21, 2004, NOAA's contractor completed excavation, having removed an estimated 752 CY of below grade PCS and bringing the total volume of PCS removed during the corrective action to approximately 1,327 CY (Figure 4). PCS was removed to the extent practicable.

In addition to the removal of PCS, roofing tar, a solid waste, was removed from the site and loaded into 55-gallon drums and Supersacks™. NOAA disposed of the tar-soil in Supersacks™ with Rabanco in Seattle, Washington in March 2005. NOAA disposed of the six drums of tar pieces with Waste Management Inc. dba Columbia Ridge landfill in Arlington, Oregon in June 2005.

During this corrective action, NOAA's contractors transported PCS directly to either the ADEC-approved PCS stockpile on Tract 42 or NOAA's National Weather Service landspreading area (Figure 5). At Tract 42, the PCS was incorporated in to the municipal solid waste soil cover. At the landspreading area, the PCS was spread no more than 1.5 ft ± 0.5 ft deep and tilled to facilitate the reduction of petroleum product levels via aeration and microbial action (NOAA 2004d). Concrete pieces from the drum pad foundation were stockpiled at the Diesel Seep Site and subsequently used as backfill material at the Lukanin Bay PCS Site (Site 33/TPA Site 12c).

Backfill operations involved transporting clean fill from the Ridgewall scoria pit to the site, dumping the material into the excavation, and compacting the fill material. Approximately 708 CY of scoria were used to backfill the excavation. The backfilled area was leveled to the surrounding grade.

Confirmation soil samples collected from the excavation at the Tract 50 Drum Platform Foundation Site indicated concentrations of DRO exceeding the ADEC Method Two cleanup level of 250 mg/kg. DRO concentrations varied from not detected to 11,000 mg/kg with 14 of 27 samples exceeding the cleanup level (Tables 1 and 2; Figure 4). No other analytes exceeded cleanup levels. Samples exceeding the ADEC Method Two DRO cleanup level were collected from the bottom of the excavation, near the groundwater interface. Hence, further excavation in these areas was not practicable. Groundwater in the vicinity of the site is being addressed under a separate action.

**Recommended Action:**

In accordance with paragraph 59 of the Two Party Agreement (NOAA 1996), NOAA requests written confirmation that NOAA completed all appropriate corrective action, to the maximum extent practicable, at the Tract 50 Drum Platform Foundation Site (NOAA Site 58) in accordance with the Agreement and that ADEC grant a conditional closure not requiring further remedial action from NOAA. NOAA understands ADEC will/may require additional containment, investigation, or cleanup if subsequent information indicates that the level of contamination that remains does not protect human health, safety, or welfare, or the environment.

**References:**

Alaska Department of Environmental Conservation (ADEC). 1991. *Interim Guidance for Non-UST Contaminated Soil Cleanup Levels. Contaminated Sites Program.* July 17.

ADEC. 2003. Title 18 of the *Alaska Administrative Code* (18 AAC) 75, Articles 3 and 9. *Oil and Hazardous Substances Pollution Control Regulations.* State of Alaska. Effective date January 30, 2003.

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Tract 50 Drum Platform Foundation Site  
NOAA Site 58  
St. Paul Island, Alaska**

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Columbia Environmental Sciences, Inc. (CESI). 2001. *Draft Site Characterization Report, the Salt Lagoon Diesel Seep (TPA Site 13), St. Paul Island, AK*. Version 1.3. April 26.

IT Alaska Corporation (IT Alaska). 2002. *Diesel Seep (TPA 13) Site Characterization, Draft, St. Paul Island, Alaska*. February.

Kelly-Ryan Inc. 2004. Salt Lagoon Channel and Dewatering Area Testing Results. August 18.

National Oceanic and Atmospheric Administration (NOAA). 1996. *Pribilof Islands Environmental Restoration Two-Party Agreement, Attorney General's Office File No. 66-1-95-0126*. January 26.

NOAA. 2004a. *Final Corrective Action Plan, Sites 34 and 35, Two-Party Agreement Sites 13A and 13B, Diesel Seep Site (Uplands and Channel), St. Paul Island, Alaska*. National Oceanic and Atmospheric Administration Pribilof Project Office. June 23.

NOAA. 2004b. *Correction Action Plan Addendum #1, Sites 34 and 35, Two-Party Agreement Sites 13A and 13B, Diesel Seep Site (Uplands and Channel), St. Paul Island, Alaska*. National Oceanic and Atmospheric Administration Pribilof Project Office. June 19.

NOAA. 2004c. *Correction Action Plan Addendum #2, Sites 34 and 35, Two-Party Agreement Sites 13A and 13B, Diesel Seep Site (Uplands and Channel), St. Paul Island, Alaska*. National Oceanic and Atmospheric Administration Pribilof Project Office. October 28.

NOAA. 2004d. *Operations Work Plan, Petroleum Contaminated Soil Remediation by Landspreading, St. Paul Island, Alaska*. June 23.

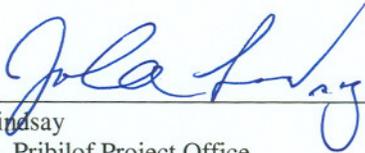
NOAA. 2005. *Final Corrective Action Report, Tract 50 Drum Platform Foundation—Site 58, St. Paul Island, Alaska*. July 6.

Tetra Tech EMI (Tetra Tech). 2005. *Final Field Investigation Report, St. Paul Island, Alaska, Pribilof Islands Environmental Restoration Project, St. Paul Island, Alaska*. June 23.

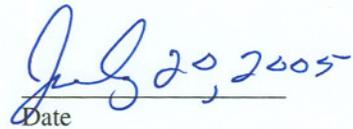
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NOAA Site 58  
St. Paul Island, Alaska

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**For the National Oceanic and Atmospheric Administration**

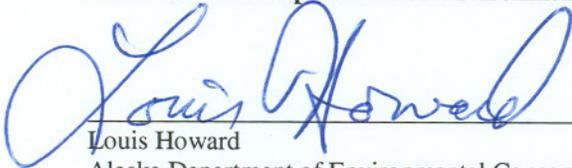


John Lindsay  
NOAA, Pribilof Project Office

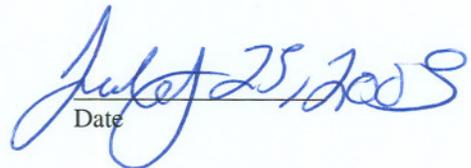
  
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**Approvals:** In accordance with Paragraph 59 of the Two Party Agreement, this is to confirm that all corrective action has been completed to the maximum extent practicable at the Tract 50 Drum Platform Foundation Site (NOAA Site 58) in accordance with the Agreement and that no further remedial action is required as a part of this conditional closure granted by ADEC.

**For the Alaska Department of Environmental Conservation**



Louis Howard  
Alaska Department of Environmental Conservation  
Remedial Project Manager

  
Date

## **Tables and Figures**

Table 1

Analytical Data Summary - DRO, GRO, RRO, and BTEX  
 Site 58 - Tract 50 Drum Platform Foundation  
 St. Paul Island, Alaska

Sample ID	Sample Depth (feet bgs)	Diesel range organics (mg/kg)		Gasoline range organics (mg/kg)		Motor Oil range organics (mg/kg)		Benzene (mg/kg)	Ethylbenzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)		
<b>Confirmation Samples</b>													
SP34-CS-101-015	1.5	10	U	1	U	50	U	0.02	U	0.02	U	0.06	U
SP34-CS-102-020	2	<b>920</b>		2		180		0.02	U	0.02	U	0.02	U
SP34-CS-103-030	3	10	U	1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-CS-104-030	3	25		1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-CS-105-030	3	<b>570</b>		27		50	U	0.02	U	0.02	U	0.02	U
SP34-CS-106-030	3	230		49		50	U	<b>0.2</b>	U	0.02	U	0.02	U
SP34-CS-107-030	3	<b>4700</b>		40		210		0.02	U	0.02	U	0.02	U
SP34-CS-108-030	3	<b>400</b>		10	U	50	U	<b>0.1</b>	U	0.1	U	0.1	U
SP34-CS-109-030	3	<b>6400</b>		91		50	U	<b>0.2</b>	U	0.2	U	0.2	U
SP34-CS-109-300 <sup>a</sup>	3	<b>4300</b>		180		50	U	<b>0.2</b>	U	0.31		0.2	U
SP34-CS-110-030	3	<b>11000</b>		65		410		<b>0.2</b>	U	0.2	U	0.2	U
SP34-CS-111-030	3	<b>480</b>		6		70		0.02	U	0.02	U	0.02	U
SP34-CS-112-030	3	<b>4900</b>		23		250		0.02	U	0.02	U	0.02	U
SP34-CS-113-030	3	<b>730</b>		10	U	75		<b>0.2</b>	U	0.2	U	0.2	U
SP34-CS-114-030	3	<b>390</b>		13		50	U	0.02	U	0.02	U	0.02	U
SP34-CS-115-030	3	27		1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-CS-116-030	3	<b>300</b>		1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-CS-116-300 <sup>b</sup>	3	<b>360</b>		1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-CS-117-030	3	10	U	1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-CS-118-030	3	28		1	U	81		0.02	U	0.02	U	0.02	U
SP34-CS-119-030	3	<b>1200</b>		20	U	170		<b>0.2</b>	U	0.2	U	0.2	U
SP34-CS-120-030	3	<b>11000</b>		160	J	50	U	<b>0.2</b>	U	0.2	J	0.2	U
SP34-CS-121-030	3	10	U	1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-CS-122-030	3	<b>3100</b>		37		50	U	<b>0.2</b>	U	0.2	U	0.2	U
SP34-CS-123-030	3	10	U	1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-CS-124-030	3	10	U	1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-CS-124-300 <sup>c</sup>	3	28		1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-CS-125-030	3	45		3		50	U	0.02	U	0.02	U	0.02	U
SP34-CS-126-020	2	43		1	U	300		0.02	U	0.02	U	0.02	U
SP34-CS-127-030	3	26		1	U	50	U	0.02	U	0.02	U	0.02	U
<b>Stockpile Samples</b>													
SP34-SS-101-015	1.5	18		1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-SS-102-015	1.5	<b>11000</b>		<b>2200</b>		1200		<b>0.7</b>		<b>6.3</b>		1.5	38
SP34-SS-103-015	1.5	<b>400</b>		10	U	50	U	<b>0.2</b>	U	0.2	U	0.2	U
SP34-SS-103-300 <sup>d</sup>	1.5	250		10	U	50	U	0.02	U	0.1		0.02	U
SP34-SS-104-015	1.5	10	U	1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-SS-105-015	1.5	<b>990</b>		35		100		<b>0.2</b>	U	0.2	U	0.2	U
SP34-SS-106-015	1.5	<b>1300</b>		18		50	U	0.02	U	0.02	U	0.02	U
SP34-SS-107-015	1.5	24		1	U	91		0.02	U	0.02	U	0.02	U
<b>Backfill Characterization Samples</b>													
SP34-BS-001-015	1.5	10	U	1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-BS-002-015	1.5	10	U	1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-BS-003-015	1.5	10	U	1	U	50	U	0.02	U	0.02	U	0.02	U
SP34-BS-003-315 <sup>e</sup>	1.5	10	U	1	U	50	U	0.02	U	0.02	U	0.02	U

ADEC Method Two Cleanup Level<sup>f</sup> 250 300 10,000 0.5<sup>g</sup> 5.5 5.4 78

Notes (Table 6-1)

- bold** Indicates concentration above cleanup levels.
- bgs Below ground surface
- mg/kg Milligram per kilogram
- U Analyte was analyzed for, but not detected above the sample reporting limit
- J Analyte was positively identified, but the numerical value is an estimated concentration; result is considered qualitatively acceptable, but quantitatively unreliable
- a Duplicate of sample number SP34-CS-109-030
- b Duplicate of sample number SP34-CS-116-030
- c Duplicate of sample number SP34-CS-124-030
- d Duplicate of sample number SP34-SS-103-015
- e Duplicate of sample number SP34-BS-003-015
- f Unless otherwise noted, cleanup level is from Title 18 of the *Alaska Administrative Code* 75 "Oil and Hazardous Substances Pollution Control Regulations," published by the State of Alaska effective January 30, 2003. Under the Two Party Agreement, NOAA is required to comply with the 1991 ADEC cleanup level for benzene (0.5 mg/kg). However, NOAA has attempted to remove benzene to within the current ADEC Method Two cleanup level (0.02 mg/kg) to the maximum extent practicable.
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Table 2

Analytical Data Summary - Polynuclear Aromatic Hydrocarbons  
 Site 58 - Tract 50 Drum Platform Foundation  
 St. Paul Island, Alaska

Sample ID	Sample Depth (feet bgs)	Acenaphthene (mg/kg)	Acenaphthylene (mg/kg)	Anthracene (mg/kg)	Benz(a)anthracene (mg/kg)	Benzo(a)pyrene (mg/kg)	Benzo(b)fluoranthene (mg/kg)	Benzo(g,h,i)perylene (mg/kg)	Benzo(k)fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo(a,h)anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno(1,2,3-cd)pyrene (mg/kg)	Naphthalene (mg/kg)	Phenanthrene (mg/kg)	Pyrene (mg/kg)
<b>Confirmation Samples</b>																	
SP34-CS-105-030	3	0.022	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.075	0.005 U	0.066	0.057	0.007
SP34-CS-109-030	3	0.28	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1	0.05 U	0.05 U	0.34	0.05 U
SP34-CS-114-030	3	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.084	0.005 U	0.005 U	0.026	0.005 U
SP34-CS-117-030	3	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
SP34-CS-122-030	3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.44	0.05 U	0.05 U	0.18	0.05 U
SP34-CS-124-030	3	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
SP34-CS-124-300 <sup>a</sup>	3	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
<b>Stockpile Samples</b>																	
SP34-SS-103-015	1.5	0.016	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.06	0.005 U	0.12	0.04	0.005 U
SP34-SS-103-300 <sup>b</sup>	1.5	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.038	0.005 U	0.077	0.029	0.005 U
SP34-SS-107-015	1.5	0.098	0.05 U	0.12	0.17	0.17	0.19	0.077	0.08	0.19	0.05 U	0.37	0.087	0.074	0.05 U	0.4	0.35
<b>Backfill Characterization Samples</b>																	
SP34-BS-001-015	1.5	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
SP34-BS-002-015	1.5	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
SP34-BS-003-015	1.5	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U
SP34-BS-003-315 <sup>c</sup>	1.5	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U

ADEC Method Two Cleanup Level<sup>d</sup>      210                      n/a                      4,300                      6                      3                      20                      n/a                      200                      620                      6                      2,100                      270                      54                      43                      n/a                      1,500

Notes

- bgs                      Below ground surface
- mg/kg                      Milligram per kilogram
- U                      The analyte was analyzed for but not detected above the sample reporting limit.
- a                      Duplicate of sample number SP34-CS-124-030
- b                      Duplicate of sample number SP34-CS-103-015
- c                      Duplicate of sample number SP34-BS-003-015
- d                      Unless otherwise noted, cleanup level is from Title 18 of the *Alaska Administrative Code* 75 "Oil and Hazardous Substances Pollution Control Regulations" published by the State of Alaska effective January 30, 2003.

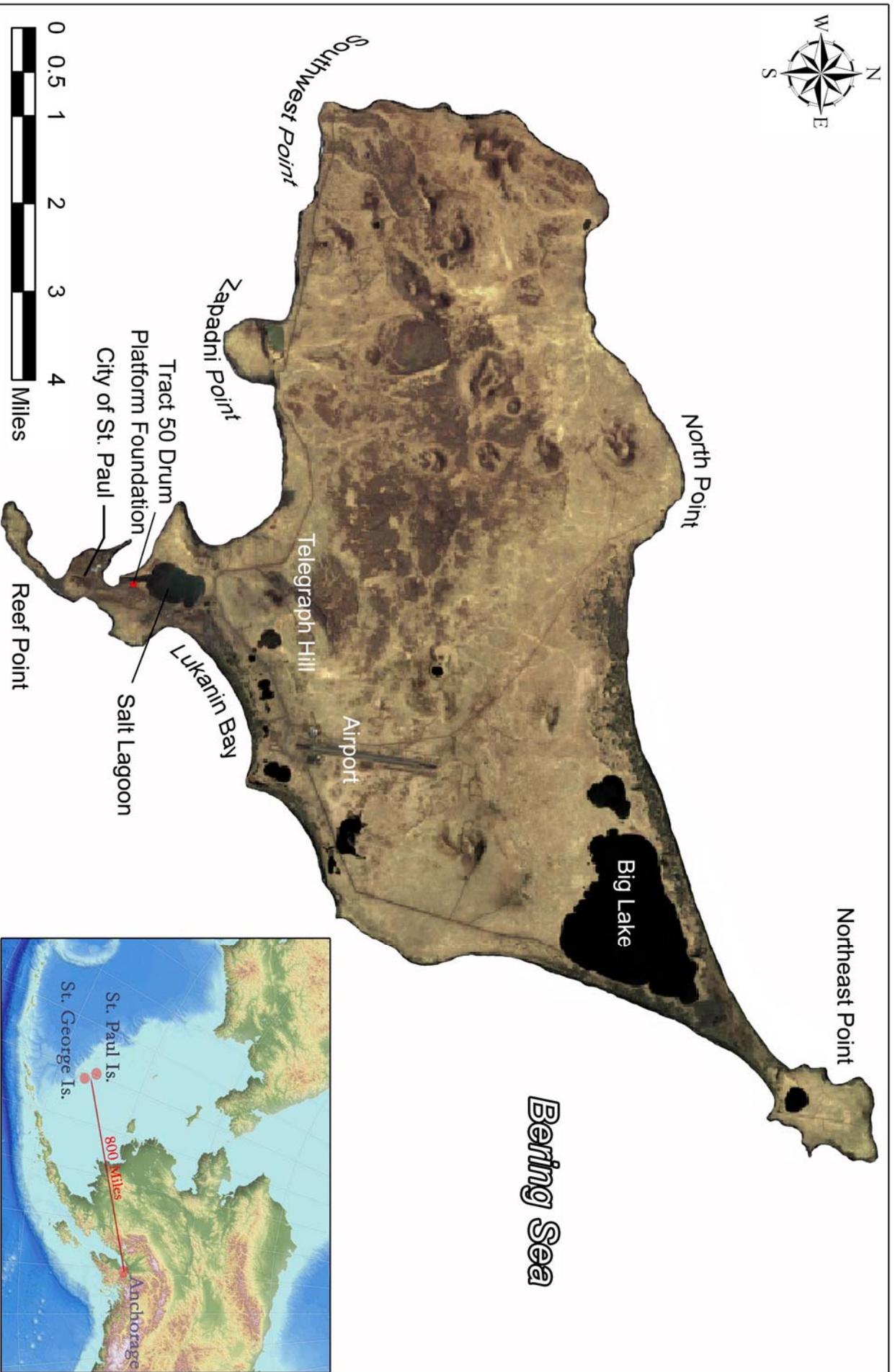
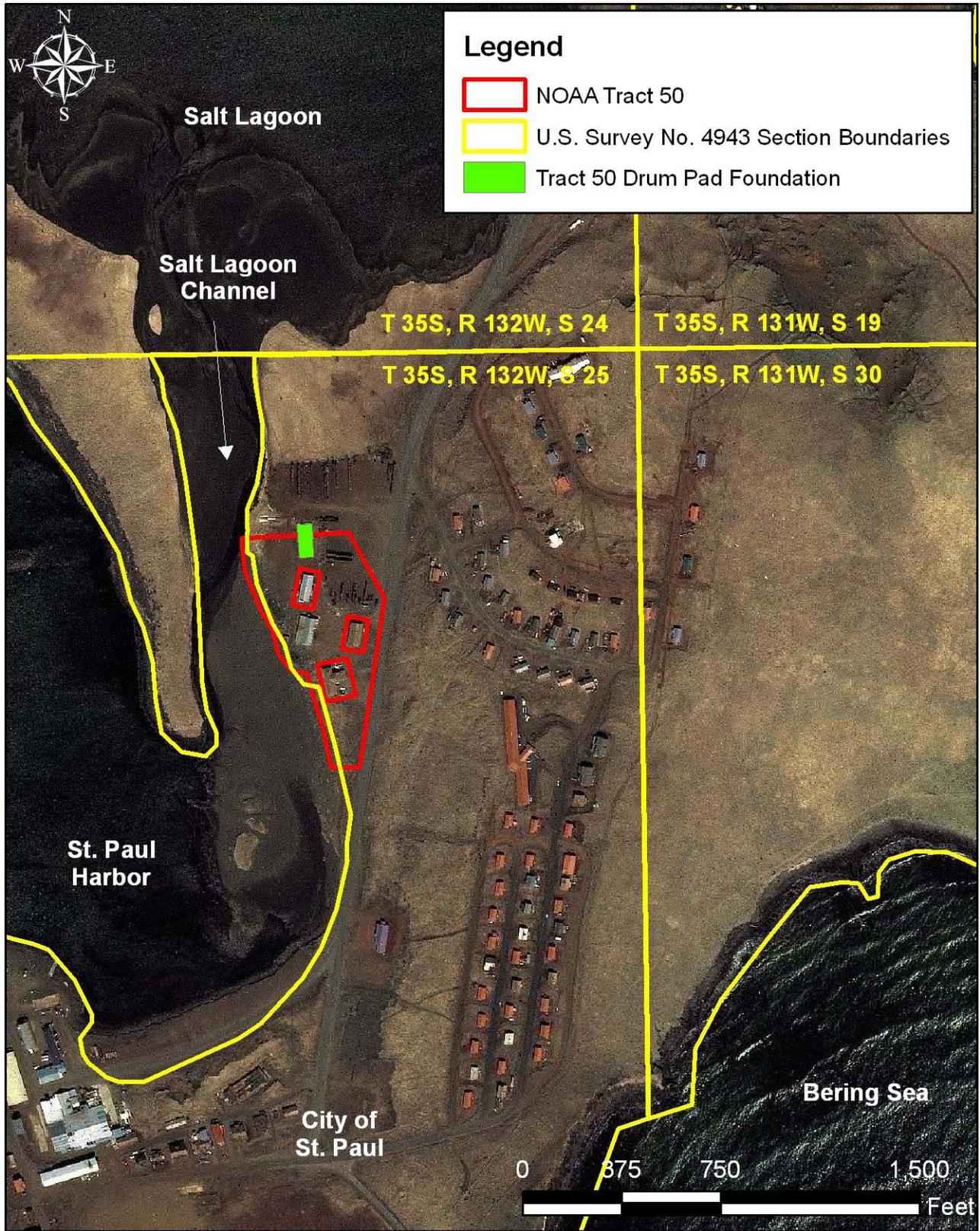


Figure  
1

St. Paul Island Vicinity Map  
Tract 50 Drum Platform Foundation  
Site 58  
St. Paul Island, Alaska

Source: Ikonos Satellite  
Imagery, 2001





<p>Figure 2</p>	<p>Legal and Property Description  Tract 50 Drum Platform Foundation Site  NOAA Site 58  St. Paul Island, Alaska</p>	<p>Sources: Public Land Survey Sections (BLM 1983), Site Location (NOAA 2004), Satellite Imagery (Ikonos 2001).</p>
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# Legend

 Monitoring Wells

Results presented represent the maximum detection for each sampling cycle, and results listed in red indicate Table C exceedances. 2000/2001 sampling results are from CESI (2001) and IT (2002). 2004 sampling results are from TTEMI (2005).



MWDS-1	2000/2001	2004
DRO	9.0 mg/L	0.05 mg/L

MWDS-3	2000/2001	2004
DRO	2.5 mg/L	0.24 mg/L

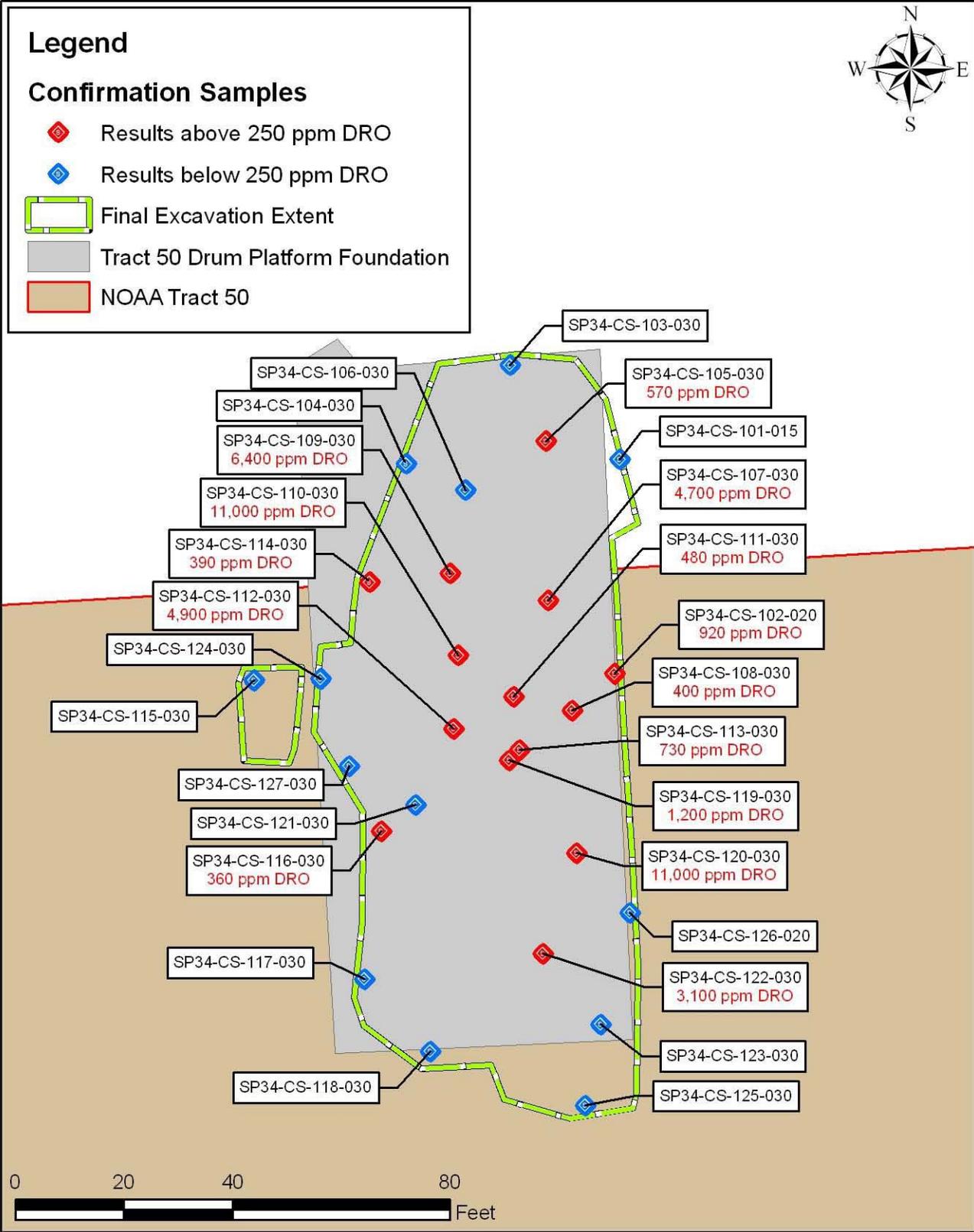
MWDS-2	2000/2001	2004
DRO	0.32 mg/L	2.7 mg/L

MWDS-5	2000/2001	2004
DRO	0.15 mg/L	0.05 mg/L

MWDS-4	2000/2001	2004
DRO	0.13 mg/L	0.1 mg/L



<p>Figure 3</p>	<p>Groundwater Sampling Locations and Results Salt Lagoon Diesel Seep NOAA Sites 34 and 35/TPA Sites 13a and 13b St. Paul Island, Alaska</p>	<p>Sources: Monitoring Well Locations and Sampling Results (NOAA 2005), Satellite Imagery (Ikonos 2001).</p>	
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**Figure 4**  
**Confirmation Sampling Locations**  
**Tract 50 Drum Platform Foundation**  
**Site 58**  
**St. Paul Island, Alaska**

Sources: Sampling Locations and Excavation Extent (NOAA Pribilof Project GIS 2005), Tract 50 (BLM MTPs 1983).





Figure 5  
 Transportation to the ADEC-approved PCS stockpile on Tract 42 and NOAA's National Weather Service landspreading area  
 Tract 50 Drum Platform Foundation  
 Site 58  
 St. Paul Island, Alaska

Sources: Landspreading site, Tract 42 PCS stockpile, and Drum Pad Foundation (NOAA Pribilof Project GIS 2005), Satellite Imagery (Ikonos 2001).